

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

n re application of:

Van Buer

Appl. No. 10/040,087

Filed: May 15, 2002

For:

Method and Apparatus for High Speed Implementation of Data Encryption and Decryption Utilizing, E.G., Rijndael or Its

Subset AES, or Other Encryption/

**Decryption Algorithms Having Similar Key** 

**Expansion Data Flow** 

Confirmation No.: 8837

Art Unit: 2137

Examiner: Smithers, Matthew

Atty Docket: 11521-006-999 (1044-404-01)

## Transmittal of Revocation and Power of Attorney with New Power of Attorney and **Change of Correspondence Address**

**Commissioner for Patents** P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Submitted herewith is a Revocation and Power of Attorney with New Power of Attorney and Change of Correspondence Address, executed by Richard E. Ballard, General Counsel of X-Labs Holdings, LLC and its Manager, Duke Equity Partners, Inc. Also attached is a copy of a Statement under 37 CFR 3.73(b), along with a copy of an Assignment from by the inventor to XLaboratories, LLC executed on October 1, 2001, and a copy of an Assignment from XLaboratories, LLC to X-Labs Holdings, LLC executed on December 17, 2003.

Applicant respectfully requests that the enclosed Revocation and Power of Attorney with New Power of Attorney and Change of Correspondence Address be made of record in the file of the instant application.

Respectfully Submitted,

Date: June 13, 2006

46,078

Richard E. Ballard X-Labs Holdings, LLC 9701 Wilshire Blvd.

Beverly Hills, CA 90212

310-855-4090

11521-006-999 (1044-404-01)

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Application Number 10/040,087

Filling Date January 4, 2006

ATTORNEY WITH

NEW POWER OF ATTORNEY

AND

First Named Inventor Darryl Van Buer

Art Unit 2137

Examiner Name Smithers, Matthew

**Attorney Docket Number** 

GE OF CORRESPONDENCE ADDRESS

		-		- 48				<del></del>
I hereby revoke all previous powers of attorney given in the above-identified application.								
✓ A Pow	A Power of Attorney is submitted herewith.							
OR								
☐ I here	eby appoint	the practitioners associate	ed with th	e Cust	omer N	umber:		
I	Please change the correspondence address for the above-identified application to:							
	ne address ustomer Nu	associated with imber:						
OR		· .						
Firm o	r lual Name	Richard Ballard		,				
Address		X-Labs Holdings, LLC 9701 Wilshire Blvd, 10th Floor						
City .		Beverly Hills		State	CA		Zip	90212
Country		USA						
Telephone		310-855-4090			Email	rick@dukeequity.com		
I am the: Applicant/Inventor.								
Assignee of record of the entire interest. See 37 CFR 3.71.  Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)								
SIGNATURE of Applicant or Assignee of Record								
Signature 14 M & BM								
Name	Richard E. Ba	I E. Ballard, General Counsel, X-Labs Holdings, LLC						
Date	June 13, 200	6		Те	lephon	310-855-4090		
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.								
*Total of 1 forms are submitted.								

This collection of information is required by 37 CFR 1.36. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/81 (01-06) Approved for use through 12/31/2008. OMB 0651-0035

Onder the Paperwork Reduction Act of 1995, no persons are re		rademark Office; U.S. DEPARTMENT OF COMMERCE ormation unless it displays a valid OMB control number. 10/040.087
NOWER OF ATTORNEY	Filing Date	January 4, 2006
JUN I 3 2006 and	First Named Inventor	Darryl Van Buer
	Title .	Method and Apparatus for High Speed
	Art Unit	2137
INDICATION FORM	Examiner Name	Smithers, Matthew
	Attorney Docket Number	11521-006-999 (1044-404-01)

I hereby revoke all previous powers of attorney given in the above-identified application.							
I hereby revoke all	l previo	us powers of attorney give	ven in the ab	ove-id	entified appli	cation.	
I hereby appoint:		[	-				
Practitioners ass	sociated	with the Customer Number:					
OR							
✓ Practitioner(s) na	amed be	low:					·
		Name			Registra	tion Numbe	er
Richard E. Balla	ard			46,078			
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as my/our attorney(s) o Trademark Office conn	or agent( ected th	s) to prosecute the application i erewith.	identified above	, and to	transact all busii	ness in the (	United States Patent and
Please recognize or ch	ange the	correspondence address for the	he above-identit	fied appl	ication to:	10 1	•
The address a	associate	ed with the above-mentioned C	ustomer Numbe	er:			
OR		. [				7	
The address	associat	ed with Customer Number:	•			.	
OR							
Firm or Individual N	al Name Richard E. Ballard						
Address X-Labs Holdings, LLC 9701 Wilshire Blvd.							
City		Beverly Hills		State	CA Zip 90212		Zip 90212
, Country		USA				, .	
Telephone		310-855-4090		Email	rick@dukeequity.com		
I am the:  Applicant/Inve	ntor						
		he entire internet See 27 CED	274				
Assignee of record of the entire interest. See 37 CFR 3.71.  Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)							
SIGNATURE of Applicant or Assignee of Record							
Signature	gnature Bolly 3 Polity				Date	June 13, 2006	
Name	ame Richard E. Ballard				Telephone	310-855-4090	
Fitle and Company General Counsel, X-Labs Holdings, LLC (Assignee of Record Entire Interest)							
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.							
*Total of	1	forms are submitted.					

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/96 (12-05)

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: X-Labs Holdings. LLC	
Application No./Patent No./Control No.: 10/040.087	Filed/Issue Date: Jaunary 4, 2006
Entitled: Method and Apparatus for High Speed Implementation of D AES, or toehr Encryption/Decryption Algorithms Having Sim	ata Encryption and Decryption Utilizing, E.g., Rijndael or its Subset illar Key Expansion Data Flow.
	, a Limited Liability Corporation
(Name of Assignee) states that it is: 1.   1.   1.   1.   1.   1.   1.   1.	(Type of Assignee: corporation, partnership, university, government agency, etc.)
2. an assignee of less than the entire right, title and interest (The extent (by percentage) of its ownership interest is	%)
in the patent application/patent identified above by virtue of eith	ner:
	ion/patent identified above. The assignment was recorded I, Frame, or a true copy of the
B. A chain of title from the inventor(s), of the patent applica	tion/patent identified above, to the current assignee as follows:
From: Darrel J. Van Buer To     The document was recorded in the United States     Reel 012459 , Frame 0797	
2. From: XLaboratories, L.L.C. To	
The document was recorded in the United States Reel, Frame	· · · · · · · · · · · · · · · · · · ·
3. From: To	):
The document was recorded in the United States Reel, Frame	
.  Additional documents in the chain of title are listed on	a supplemental sheet.
As required by 37 CFR 3.73(b)(1)(i), the documentary evide assignee was, or concurrently is being, submitted for recognise [NOTE: A separate copy (i.e., a true copy of the original as Division in accordance with 37 CFR Part 3, to record to 302.08]	rdation pursuant to 37 CFR 3.11.
The undersigned (whose title is supplied below) is authorized to	o act on behalf of the assignee. June 13, 2006
Signature	Date
Richard E. Ballard	310-855-4090
Printed or Typed Name	Telephone Number
General Counsel Title	

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

## EXHIBIT 4

# PATENT ASSIGNEMNT

I/WE, X Laboratories (ASSIGNOR)

For good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, do hereby sell and assign to X-Labs Holdings, LLC (ASSIGNEE), its successors, assigns and legal representatives all my/our right, title and interest, in and for the United States of America, in and to the inventions entitled below:

Title	Filing Date	USPTO Serial No.
Method and Apparatus for Electronically Extracting Documents Potentially Containing Application Specific Multidimensional Information from a Library of Searchable Documents	12/19/2001	10/025,342
Method and Apparatus for Electronically Extracting Application Specific Multidimensional Information from Documents Selected from a Set of Documents Electronically Extracted from a Library of Electronically Searchable Documents	12/19/2001	10/026,065
Method and Apparatus for Electronically Extracting Application Specific Multidimensional Information from a Library of Searchable Documents and for Providing the Application Specific Information to a User Application	12/19/2001	10/025,349
Method and Apparatus for High Speed Implementation of Data Encryption and Decryption Utilizing, e.g., Rijndael or its Subset AES, or Other Encryption/Decryption Algorithms Having Similar Key Expansion Data Flow	1/4/2002	10/040,087
Method and Apparatus for High Speed Key Expansion in a Parallel Pipelined Implementation of, e.g., Rijndael or Its Subset AES, or Other Encryption Algorithms with Similar Key Data Flow	1/4/2002	10/038,999
Method and Apparatus for Augmented Reality Hybrid Tracking System with Fiducial-Based Heading Correction	10/18/2002	10/282,397
Method and Apparatus for Iterative Equalization/Decoding MIMO Transmissions Over MIMO Channels Utilizing a Per-Antenna Equalization Architecture	7/25/2002	60/398,528
Method and Apparatus for Iterative Equalization/Coding MIMO Transceiver	7/25/2002	60/398,527

Application-Specific Object-Based Segmentation and Recognition System Having an Improved Background Modeling Module	8/22/2002	60/405,201
Application-Specific Object-Based Segmentation and Recognition System Having an Improved Background Modeling Module	8/22/2002	60/405,337
Application-Specific Object-Based Segmentation and Recognition System	8/22/2002	60/405,346

and all United States Letters Patent which may be granted therefore, and all divisions, reissues, continuations and extensions thereof, the said interest being the entire ownership of the said Letters Patent when granted, to be held and enjoyed by the said ASSIGNEE, its successors, assigns or other legal representatives, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me/us if this assignment and sale had not been made;

And I/we hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to the said ASSIGNEE.

## Signed on

"ASSIGNOR"

DATED

X Laboratories, LLC

December 17, 2003

By: Its Attorney in Fact

Name: Gerard Casale.

Title: Managing Partner, Casale Alliance, LLP

### **ASSIGNMENT**

WHEREAS, I Darrel J. Van Buer a citizen, of the United States, whose post office addresses is 11840 Pacific Avenue, Los Angeles, CA 90066, have made an invention together for which we are about to make application for Letters Patent of the United States entitled "Method and Apparatus for High Speed Implementation of Data Encryption and Decryption Utilizing, e.g., Rijndael or its Subset EAS, or Other Encryption/Decryption Algorithms Having similar Key Expansion Data Flow;" and

WHEREAS, XLaboratories, L.L.C., a limited liability company organized and existing under the laws of the State of California, and having an office for the transaction of business at 11755 Wilshire Boulevard, Suite 1200, Los Angeles, CA, 90025, is desirous of acquiring the entire right, title and interest in and to said invention and any improvements thereon, and in and to the said application for Letters Patent thereof, and any Letters Patent which may be obtained therefrom;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, BE IT KNOWN, that I, the said Darrel J. Van Buer for and inconsideration of the sum of One Dollar (\$1.00), lawful money of the United States, to us in hand paid by said XLaboratories, and other good and valuable consideration unto us moving from said XLaboratories, at and before the execution and delivery of these presents, the receipt of which is hereby acknowledged, have sold, assigned, transferred and conveyed and by these presents, do sell, assign, transfer and convey, unto said XLaboratories, its successors, assigns and heirs the entire right, title and interest in and to the said invention for which we are about to make application for Letters Patent of the United States entitled "Method and Apparatus for High Speed Implementation of Data Encryption and Decryption Utilizing, e.g., Rijndael or its Subset EAS, or Other Encryption/Decryption Algorithms Having similar Key Expansion Data Flow," executed concurrently herewith, and any and all improvements thereon, and in and to said application and any divisional, continuation or continuation-in-part applications thereof, and in and to any Letters Patent of the United States which may be issued on any of said applications, and any reissues thereof, and in and to any and all applications for Letters Patent filed in foreign countries for said invention or improvements including all priority rights, and any and all Letters Patent which may be granted in foreign countries therefor, TO HAVE AND TO HOLD THE SAME to the full end of the term or terms for which any and all said Letters Patent may be granted;

AND I, the said Darrel J. Van Buer do hereby authorize and request the Commissioner of Patents and Trademarks to issue the said Letters Patent of the United States to said XLaboratories, as the assignee of the entire right, title and interest in and to the same, for the sole use and benefit of said XLaboratories, its successors and assigns;

AND I, the said **Darrel J. Van Buer**, for the considerations aforesaid, do hereby covenant and agree to and with said **XLaboratories**, its successors and assigns, that we have the full power t make this assignment, and that the rights assigned are not encumbered by any grant, license or right heretofore given, and that we, our executors or administrators, shall and will do all lawful acts and things and make, execute and deliver without further compensation, any and all other instruments in writing, further applications, papers, affidavits, powers of attorney, assignments, and other documents which, in the opinion of counsel

for said XLaboratories, its successors and assigns, may be required or necessary more effectively to secure to and vest in said XLaboratories, its successors and assigns, the entire right, title and interest in and to said invention and improvements, applications, Letters Patent, rights, titles, benefits, privileges, and advantages hereby sold, assigned, transferred and conveyed, and that we will sign any applications for reissue which may be desired by the owner of the patent or patents which may be issued for the said invention or improvements.

Subscribed and executed at Malibu, Los Angeles County, California on September, 2001

Darrel J. Van Buer